

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021123**Date Inspected:** 15-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Westmont Industries**Location:** Santa Fe Springs, CA.**CWI Name:** Ruben Dominguez**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Travelers**Summary of Items Observed:**

This Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding, QC inspection and non-destructive testing of the Travelers.

Upon the arrival of the QA Inspector, the following observations were made:

Traveler Test Rack

This QA Inspector randomly observed WMI production personnel performing fitting, welding and cutting activities on various assemblies for the Traveler Test Rack.

E2/E3-EB Traveler-South

This QA Inspector observed Smith Emery QC Inspector Mr. Ruben Dominguez performing what appeared to be final visual testing on the previously completed welds for the E2/E3-EB South side section. During observation, this QA Inspector observed Mr. Dominguez utilizing a soapstone marker to mark the areas of the welds which appeared to be non-conforming to the requirements of AWS D1.1 2002, Visual Testing criteria. During observation, this QA Inspector observed that the areas marked by Mr. Dominguez appeared to be insufficient weld size and profiles, excessive undercut and weld spatter. After observing Mr. Dominguez performing the above mentioned testing, this QA Inspector then observed WMI production welder Mr. Jose Rodriguez (WID # 3031) utilizing a hand held mechanical grinder and scraper to remove the excessive weld spatter. This QA Inspector then observed Mr. Rodriguez performing Flux Core Arc Welding (FCAW) activities on the areas which had been marked by Mr. Dominguez as insufficient weld size, profile and undercut. Near the end of the shift, Mr. Dominguez explained to this QA Inspector that the above mentioned tested welds appeared to be acceptable.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

E2/E3-EB Traveler-North

This QA Inspector observed WMI production welder Mr. Cesar Canales (WID # 3195) continuing to perform Flux Core Arc Welding (FCAW) tacking and fitting activities on Tube Steel (TS) and connector plate material. This QA Inspector observed that the activities were being performed on the frame assemblies identified as A323, A316, A317, A314, A312, A327 and B327, North Side section of the E2/E3-EB Traveler. Additionally, this QA Inspector observed WMI production welder Mr. Juan Jimenez (WID # 3059) continuing to perform Flux Core Arc Welding (FCAW) activities on the above mentioned assemblies. This QA Inspector observed Mr. Jimenez performing the FCAW in all positions, throughout the shift. Additionally, this QA Inspector observed WMI production welder Mr. Eutimo Lopez (WID # 3035) performing Flux Core Arc Welding (FCAW) activities on the above mentioned assemblies. This QA Inspector observed Mr. Lopez performing the FCAW in all positions, throughout the shift.

This QA Inspector performed random Ultrasonic Testing (UT) on the Complete Joint Penetration (CJP) welds, suspension arm cover plates, Frame Assemblies identified as 7-A327 and 8-B327, E2/E3-EB Traveler-North. Prior to performing the testing, this QA Inspector noted that the weld joint preparation appeared to be designated as a single bevel butt joint, with backing. This QA Inspector also noted that SE QC Inspector Ruben Dominguez had previously performed Ultrasonic Testing (UT) on the welds and had found no rejectable indications. Initially, this QA Inspector performed a straight or longitudinal beam scan on the base metal areas, to verify that laminar defects were not present in the base metal area, through which subsequent angle beam inspection will be performed.

After performing the straight beam scan, this QA Inspector noted that no laminar defects were present in the base metal. This QA Inspector utilized a GE USN 60 testing instrument and a 25 mm diameter, 2.25 MHz transducer to perform the longitudinal beam scan. This QA Inspector then proceeded to perform the shear wave inspection, utilizing the above mentioned testing instrument and a 19 mm x 16 mm square transducer coupled to a 70 degree angle Lucite wedge. This QA Inspector performed the above mentioned testing in accordance to AWS D1.1 2002 and the applicable procedure, SE-UT-CT-D1.1-104. After testing, this QA Inspector found no rejectable indications and completed an applicable Ultrasonic Testing report (TL 6027).

SAS-WB Traveler

This QA Inspector observed WMI production welder Mr. Larry Swanson (WID # 3038) performing Flux Core Arc Welding (FCAW) tacking and fitting activities on the Frame Assembly identified as 13 B141. This QA Inspector observed Mr. Swanson performing the tacking and fitting activities on previously cut to length Tube Steel (TS) material throughout the shift. Additionally, this QA Inspector observed WMI production welder Mr. Charles Newton (WID # 3200) performing Flux Core Arc Welding (FCAW) activities on the above mentioned assembly. This QA Inspector observed Mr. Newton performing the FCAW in all positions, throughout the shift.

This QA Inspector randomly observed that Smith Emery QC Inspector Mr. Ruben Dominguez was present, during the above mentioned welding and fitting activities. During random observation, this QA Inspector observed that the applicable WPS's and copies of the shop drawings, appeared to be located near each work station, where the above mentioned welding and fitting activities were being performed. This QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the applicable process and position of welding. This QA Inspector randomly observed QC Inspector Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the applicable

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

WPS.

This QA Inspector observed that the activities mentioned above, appeared to be in compliance with the contract requirements and this QA Inspector observed no non-conforming issues, on this date.

This QA Inspector continued to perform courtesy preliminary reviews of WMI Weekly Weld Reports, prior to WMI formally submitting to Caltrans for review.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Edmondson,Fred	QA Reviewer
